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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/607,917

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Kyung-Hun Jang

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EXAMINER

HOFFMAN, BRANDON S

ART UNIT

PAPER NUMBER

2436

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/607,917	<b>Applicant(s)</b> JANG ET AL.	
	<b>Examiner</b> BRANDON S. HOFFMAN	<b>Art Unit</b> 2436	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,10-12,14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 2,9,13 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-19 are pending in this office action, claims 16-19 are newly added.
2. Applicant's arguments, filed March 18, 2009, have been fully considered and they are persuasive.

### ***Claim Rejections***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

4. Claim 12, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eskicioglu (U.S. Patent Pub. No. 2002/0108040) in view of Watanabe et al. (U.S. Patent No. 7,072,657).

Regarding claim 12, Eskicioglu teaches an apparatus for allocating a plurality of encryption keys differentiated according to a plurality of access authorization classes, the differentiated encryption keys provided to communicate data with corresponding access points, the apparatus comprising:

- An encryption key storing unit which stores the differentiated encryption keys (paragraph 0088-0092); and

- An encryption key allocation unit which reads an encryption key from the encryption key storing unit corresponding to a determination result of the access authorization determining unit and transfers a value of the encryption key to the wireless station (paragraph 0092).

Eskicioglu does not teach determining an access authorization class for communication between the wireless station and an AP.

Watanabe et al. teaches determining an access authorization class for communication between the wireless station and an AP (col. 7, lines 4-6).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine determining an access authorization to the access point not available for communications, as taught by Watanabe et al., with the method of Eskicioglu. It would have been obvious for such modifications because the proper access authorization ensures the proper credentials are given to gain access.

Regarding claims 18 and 19, Eskicioglu as modified by Watanabe et al. teaches wherein the access authorization is allocated to each of a plurality of areas in a wireless network, each of the areas being classified according to mobile characteristics of the wireless station including a roaming or a hand-off operation and is used for the wireless station to access an access point which exists in the classified area (see col. 7, lines 17-40 of Watanabe et al.).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. (U.S. Patent No. 6,289,102) in view of Eskicioglu (U.S. Patent Pub. No. 2002/0108040).

Regarding claim 14, Ueda et al. teaches a computer readable storage medium storing instructions which, when executed causes execution of a program implementing a structure of a wireless data packet in a wireless network that comprises a wireless station and an access point, the structure comprising:

- A header of said data packet transmitted through the wireless network (fig. 1, SECTOR HEADER FIELD);
- An encrypted data field in which data contents to be transmitted are encrypted and stored (fig. 1, USER DATA FIELD and fig. 13, section E); and
- An error correction field, which is used to correct data error (fig. 1, ECC).

Ueda et al. does not teach an access authorization information storing field, which indicates access authorization for communication between the wireless station and the access point, wherein: the access authorization information storing field comprises access authorization information being used for allocating encryption keys differentiated according to access authorization classes, and the differentiated encryption keys are provided to communicate data with corresponding access points.

Eskicioglu teaches an access authorization information storing field, which indicates access authorization for communication between the wireless station and the access point, wherein: the access authorization information storing field comprises access authorization information being used for allocating encryption keys differentiated according to access authorization classes, and the differentiated encryption keys are provided to communicate data with corresponding access points (paragraph 0038, 0047, and 0088-0094).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine a field for access authorization information storing, as taught by Eskicioglu, with the medium of Ueda et al. It would have been obvious for such modifications because the access authorization field tells the device being accessed which level of access needs to take place.

#### ***Allowable Subject Matter***

5. Claims 13 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 1-11, 16, and 17 are allowed.

#### ***Response to Arguments***

Art Unit: 2436

7. Claims 12, 14, and 18-19 remain rejection because the independent claim language does not state that the keys are obtained "in advance," as do claims 1 and 8.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON S. HOFFMAN whose telephone number is (571)272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brandon S Hoffman/  
Primary Examiner, Art Unit 2436